

Remarks

Reconsideration of this Application is respectfully requested.

Claims 1-23 are pending in the application, with claims 1, 12, 13, 16, and 22 being the independent claims. The foregoing amendments to the specification are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objections to the Specification

In the Office Action, the disclosure was objected to because "the specification refers to an 'application domain'. The reference number identifying the application domain is presented as both 250 and 290. Figure 2 indicates the application domain as reference number 290." (Office Action, p. 2) Applicants have amended paragraphs [0023] and [0025] to make the reference number for the "application domain" consistent with the reference number used in FIG. 2. Reconsideration and withdrawal of the objection is therefore respectfully requested.

Rejections under 35 U.S.C. § 102

In the Office Action, claims 1-23 were rejected under 35 U.S.C. §102(e) as being anticipated by Patterson, et al, U.S. Publication No. 2004/0036575 (Patterson). Applicants respectfully traverse this rejection.

To anticipate a claim, every element of the claim must be found or inherently described in a single reference. M.P.E.P. §2131. Patterson does not teach or suggest each and every element of Applicants' independent claims 1, 12, 13, 16, and 22.

Patterson describes a system which simultaneously transmits a continuous interrogation signal and a pulsed interrogation signal. (Patterson, ¶0018, lines 1-3). The pulsed signal increases the read range of the system, while the continuous signal reduces the read time. (Patterson, ¶0018, lines 5-6). Distant tags 8 that are beyond a radius 5 (created by the continuous interrogation signal) are energized by the pulsed interrogation signals 3, but may time-out between pulses. (Patterson, ¶0018, lines 12-14). The distant tags 8 are read by the pulsed interrogation signal 3, but because of the potential for time-out and resetting, tags 8 take longer to read than tags 6 within radius 5, which remain energized. (Patterson, ¶0018, lines 25-28).

In the Office Action, the Examiner states that "the confirmed read flag indicates the tag has been previously read (an indication of the tag being previously read occurs when the tag is off)." (Office Action, p. 3). It appears that the Examiner is equating a tag that is off in Patterson to the "confirmed read flag," recited in Applicants' independent claims 1, 12, 13, and 16. Applicants respectfully disagree with the Examiner's understanding. As described in Patterson and is well-known in the art, a tag can be "off" without previously being read for a variety of reasons including loss of power. In addition, a passive tag entering an interrogation field is initially off prior to being powered by the interrogation signal. Thus, a tag being "off" is not an indicator that the tag has been previously read.

Furthermore, Patterson does not teach or suggest that a tag stores an indication that the tag has been previously read. As described in Patterson:

In one example used herein to illustrate the invention, the RFID reader transmits a coded interrogation signal to look for a tag. A tag receiving the interrogation signal responds with a tag ID. The reader then uses the tag ID to address that particular tag, causing the tag to transmit its stored data ... The reader can then tell the tag to turn-off for now so that it will not continue to respond to the interrogation signal. The reader will then select another tag ID and poll that tag for its data, and so on until all of the tags have been read. When no more tag IDs are being received, the reader may send a wake-up signal to turn all of the tags on, or alternatively, one or more tags can be addressed individually to turn-on. If no wake up signal is sent to turn on the tags, they typically will automatically turn back on after a preselected time period has expired.

(Patterson, ¶0019). Thus, a tag in Patterson that is turned-on has no mechanism to determine whether it has been previously read. Accordingly, Patterson does not teach or suggest a method in an RFID tag device comprising:

- (a) receiving a symbol from a reader when an operating state of the tag is a first state;
- (b) if the received symbol has a first logical value, transitioning the operating state to a second state; and
- (c) if the received symbol has a second logical value, performing the following steps:
 - (1) evaluating a confirmed read flag,
 - (2) if the confirmed read flag indicates the tag has been previously read, transitioning the operating state to a dormant state, and
 - (3) if the confirmed read flag indicates that the tag has not been previously read, transitioning the operating state to the second state.

as recited in independent claim 1. Patterson also does not teach or suggest a method in an RFID tag comprising:

- (a) determining whether a read status check symbol has been received;
- (b) if it is determined that a read status check symbol has not been received, performing the steps of:
 - (1) evaluating the confirmed read flag;
 - (2) if the confirmed read flag indicates the tag has been previously read, transitioning the operating state to a dormant state; and

- (3) if the confirmed read flag indicates that the tag has not been previously read, transitioning the operating state to the second state.

as recited in independent claim 12. Furthermore, Patterson does not teach or suggest a method in an RFID tag comprising

- (a) negotiating a complete tag identification number with the reader when the operating state is a tree traversal state;
- (b) receiving a symbol from the reader;
- (c) if the symbol has the first logical value, setting the confirmed read flag to indicate that the tag has been read; and
- (d) transitioning the operating state to the dormant state.

as recited in independent claim 13. In addition, Patterson does not teach or suggest an RFID tag comprising "means for storing a confirmed read flag that indicates whether the tag has been recently read" and "means for responding to an interrogation by a reader, including means for evaluating the value of the confirmed read flag upon receipt of a first logical symbol from a reader when an operating state is a first state," as recited in independent claim 16.

As described above, Patterson teaches that a reader can "wake-up" all the tags in the field or individually address one or more tags to turn-on. Patterson does not teach or suggest interrogating tags based on their status as read or unread. Accordingly, Patterson does not teach or suggest a method in an RFID reader comprising "(a) determining whether an interrogation of all tags in the population of tags is required or whether an interrogation of only unread tags is required; if it is determined in step (a) that all tags in the population of tags are to be interrogated, transmitting a first symbol to the population of tags; and (c) if it is determined in step (a) that only unread tags are to be interrogated, transmitting a second symbol to the population of tags," as recited in independent claim 22.

For at least the reasons described above, independent claims 1, 12, 13, 16, and 22 are patentable over Patterson. Claims 2-11 depend from claim 1, claims 14 and 15 depend from claim 13, claims 17-21 depend from claim 16, and claim 23 depends from claim 22. For at least the reasons described above in regards to claims 1, 12, 13, 16, and 22, and further in view of their own features, claims 2-11, 14, 15, 17-21, and 23 are patentable over Patterson. Reconsideration and withdrawal of this rejection is therefore respectfully requested.


Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Lori A. Gordon". The signature is fluid and cursive, with the first name "Lori" being more prominent.

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